

What is claimed is:

1. A threat detection interface system for providing an alert to an operator of a vehicle relating to a threat identified by a threat detection system comprising:

a control interface coupled to the threat detection system for resolving a threat detection signal;

a plurality of vibratory units in tactile communication with the operator, said plurality of vibratory units being coupled to said control interface; and

a control signal generated by said control interface for controlling said plurality of vibratory units based upon a determined direction and distance of the identified threat relative to the vehicle.

2. The detection interface system according to claim 1 wherein the control signal activates a selected vibratory unit based upon the direction of the identified threat relative to the vehicle.

3. The detection interface system according to claim 1 wherein the control signal modulates a selected vibratory unit based upon the distance of the identified threat relative to the vehicle.

4. The detection interface system according to claim 1 wherein the control signal selectively activates and modulates multiple vibratory units based upon the direction and distance respectively, of multiple identified threats relative to the vehicle.

5. The detection interface system according to claim 1 wherein said plurality of vibratory units is located in a harness worn by the operator.

6. The detection interface system according to claim 5 wherein the harness is integral to an article worn by the operator.
7. The detection interface system according to claim 1 wherein said plurality of vibratory units is distributed on the operator's back.
8. The detection interface system according to claim 1 wherein said plurality of vibratory units is distributed around the operator's torso.
9. The detection interface system according to claim 1 wherein said plurality of vibratory units is distributed on the operator's torso, head and legs.
10. A threat detection interface system for providing an alert signal to a user, the alert signal relating to an identified threat relative to an identified position of an object, the system comprising:
 - a plurality of vibratory units selectively located to be in tactile communication with the user; and
 - a control interface coupled to said plurality of vibratory units, said control interface generating a control signal based upon the identified threat, the control signal controlling said plurality of vibratory units based on a determined direction and distance of the identified threat relative to the object.
11. The detection interface system according to claim 10 wherein the control signal activates a selected vibratory unit based upon the direction of the identified threat relative to the object.
12. The detection interface system according to claim 10 wherein the control signal modulates a selected vibratory unit based upon the distance of the identified threat relative to the object.

13. The detection interface system according to claim 10 wherein the control signal activates and modulates selected multiple vibratory units based upon the direction and distance respectively, of multiple identified threats relative to the object.

14. The detection interface system according to claim 10 wherein the plurality of vibratory units is located in a seating device utilized by the user.

15. The detection interface system according to claim 10 wherein said plurality of vibratory units is located in a harness worn by the user.

16. A method of indicating to a user the location of an identified threat relative to a position of an object, the method comprising the steps of:
inputting information into a control interface relating to a location of the identified threat relative to the position of the object;
generating a control signal corresponding to the received information to control at least one of a plurality of vibratory units in tactile communication with the user; and
outputting the control signal to the selected vibratory unit to indicate to the user the location of the identified threat relative to the position of the object.

17. The method according to claim 16 further comprising the step of activating a selected vibratory unit with the control signal based on an identified direction of the identified threat relative to the position of the object.

18. The method according to claim 16 further comprising the step of modulating a selected vibratory unit based on an identified distance of the identified threat relative to the position of the object.

19. The method according to claim 16 wherein the plurality of vibratory units is located in a harness worn by the user.

20. The method according to claim 19 wherein the harness is integral to an article worn by the user.

21. A threat detection interface system for providing an alert signal to a user, the alert signal relating to an identified threat relative to an identified position of an object, the system comprising:

- a plurality of tactile sensation generators selectively located to be in tactile communication with the user; and

- a control interface coupled to said plurality of tactile sensation generators, said control interface generating a control signal based upon the identified threat, the control signal controlling said plurality of tactile sensation generators based on a determined direction and distance of the identified threat relative to the object.

22. A wearable threat alerting system, comprising:

- a plurality of vibratory elements;

- means for positioning said vibratory elements against a body of a person;

- means for receiving threat position information from a threat detection system and mapping the threat position information to said plurality of vibratory elements such that a position of a threat relative to an object is mapped to one or more of said plurality of vibratory elements;

- means for energizing said plurality of vibratory elements when the threat position information is mapped to said plurality of vibratory elements.

23. The wearable threat alerting system in accordance with claim 22 wherein said threat detection system is selected from the group consisting of:

a RADAR system, an infrared system, an acoustic system, a vision system, and combinations thereof.

24. The wearable threat alerting system in accordance with claim 22 wherein said means for positioning comprises a flexible material positioned against the user's back.

25. The wearable threat alerting system in accordance with claim 22 wherein said means for positioning comprises a garment.

26. The wearable threat alerting system in accordance with claim 22 wherein said means for positioning comprises a vest surrounding the user's torso.

27. The wearable threat alerting system in accordance with claim 22 wherein the position of a threat is mapped to one or more vibratory elements positioned in or near an axis extending from said body of the user to the threat.

28. The wearable threat alerting system in accordance with claim 22 wherein said plurality of vibratory elements have a variable vibration frequency, and the wearable threat alerting system further includes means for energizing said plurality of vibratory elements at a selected vibration frequency depending on the distance from the threat to the object.

29. The wearable threat alerting system in accordance with claim 22 wherein said plurality of vibratory elements have a fixed vibration frequency, and the wearable threat alerting system further includes means for energizing said plurality of vibratory elements in pulses of variable duration, with the duration of the pulse depending on the distance from the threat to the object.